REMARKS/ARGUMENTS

The Office Action of November 30, 2005 has been carefully reviewed and this response addresses the Examiner's concerns stated in the Office Action. All objections and rejections are respectfully traversed.

I. STATUS OF THE CLAIMS

Claims 1-57 are still pending in the application.

Claims 1-19, 21-39, and 41-57 are rejected under 35 U.S.C. § 102(e) as being anticipated by Goldszmidt et al, United States Patent Number 6,195,680, issued on February 27, 2001 (Goldszmidt).

Claims 20 and 40, which depend on independent claims 1 and 27, are rejected under 35 U.S.C. § 103(a) as being unpatentable over Goldszmidt in view of Wolf et al., United States Patent Number 6,374,297, issued April 16, 2002 (Wolf).

Claims 1 and 44 have been amended to further define the invention and to correct informal errors. Support for the amendments can be found in Applicant's Specification, page 8, lines 3-17. Claims 5, 6, and 7 have been amended to provide consistency with the changes made in claim 1.

II. REJECTIONS UNDER 35 USC § 102(e)

On pages 2-8, paragraphs 2-3, the Office Action states that claims 1-19, 21-39, and 41-57 are rejected under 35 U.S.C. § 102(e) as being anticipated by Goldszmidt.

Applicant respectfully points out that the cited reference, Goldszmidt, was published on February 21, 2001, within a year of the filing date of the present application, May 29, 2001. Applicant respectfully reserves the right to file a petition under 37 C.F.R. § 1.131 to swear behind Goldszmidt.

Applicant further respectfully points out that "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628 (CAFC, 1987), M.P.E.P. § 2131. As provided by the remarks set forth below, clearly this is

not the case with the present rejection of the claims. In summary, Goldszmidt does not anticipate Applicant's invention at least because of the following:

(1) Goldszmidt does not disclose Applicant's claimed "each of said gateways responsible for managing one or more network elements" (independent claim 1) and a "plurality of distributed gateways, each for managing one or more network elements" (independent claim 44), because the servers (Applicant's gateways) of Goldszmidt do not manage the clients (Applicant's claimed network elements).

(2) Goldszmidt does not disclose Applicant's claimed "responsive to said receiving step, recovering, by the central management system, management of said one or more network elements for which said failed gateway had management responsibility by assigning management responsibility to at least one other of said plurality of distributed gateways" (independent claim 1) and "means, responsive to said means for receiving a notice of the ~~detection of~~ detected failure of one of said distributed gateways, for autonomously recovering, by the central management system, management of one or more network elements for which the detected failed gateway had management responsibility" (independent claim 44), because the servers (Applicant's gateways) of Goldszmidt do not manage the clients (Applicant's claimed network elements).

(3) Goldszmidt does not disclose Applicant's claimed "system comprising a plurality of network elements" and "plurality of distributed gateways . . . wherein each of said plurality of distributed gateways is responsible for managing one or more of said plurality of network elements" (independent claim 27), because the servers (Applicant's gateways) of Goldszmidt do not manage the clients (Applicant's claimed network elements).

(4) Goldszmidt does not disclose Applicant's claimed "gateway monitoring system" . . . operable to detect failure of at least one of said distributed gateways" and "management recovery system communicatively coupled to said plurality of distributed gateways" (independent claim 27), because Goldszmidt's clients detect failure, not Goldszmidt's control server (Applicant's claimed gateway monitoring system).

(5) Goldszmidt does not disclose Applicant's claimed "wherein said management recovery system is operable to autonomously recover management of said one or more network elements for which a detected failed gateway has management responsibility"

(independent claim 27), because the Goldszmidt's clients are not managed by any entity in Goldszmidt, including the server, the reflector, the control server, or the dispatcher.

(6) Nowhere does Goldszmidt disclose or suggest Applicant's claimed "translating a communication protocol" (dependent claim 2, and similar language in dependent claims 24, 29, 36, 47, and 54);

(7) Nowhere does Goldszmidt disclose or suggest Applicant's claimed "said one or more gateway monitoring systems polling said plurality of distributed gateway" (dependent claim 6, and similar language in dependent claims 31, and 48); and

(8) Goldszmidt would be unsatisfactory for its intended purpose if combined with Wolf (dependent claims 20 and 40).

Independent claims 1, 27, and 44

On pages 2-3 and 10, in paragraphs 3 and 6, with respect to independent claims 1 and 44,

(1) The Office Action states that Goldszmidt discloses each of said gateways responsible for managing one or more network elements (client 1.8 of FIG. 1a could be multiple clients, col. 9, line 47 – col. 10 line 48) (FIGs. 1a, 5, Abstract, col. 5, lines 22-64).

In the first cited passage (FIG. 1a; col. 9 line 47 – col. 10, line 48), Goldszmidt states that the client sends a request to the control server, and the control server determines a set of primary streaming servers that the client can connect to, that when the client detects a failure, the client communicates a request to the control server to switch to an alternate server, that the control server selects a new server, and that the new server begins providing the client with real-time multimedia streams. Elsewhere, Goldszmidt states that the client could further take the lead in selecting an alternate server by determining a delivery rate and comparing it to a threshold (col. 10, lines 49-63). Goldszmidt states that the server could send a distress or switch signal, but ultimately it is the client that detects failure and initiates recovery.

In the second cited passage (FIGs. 1a, 5; Abstract; col. 5, lines 22-64), Goldszmidt states that the control server redirects incoming client requests to streaming servers and monitors the workload of the streaming servers. Goldszmidt states that each instance of the

streaming process begins with a client's connecting to the control server which then assigns the client to one of the streaming servers based on round robin or load balancing techniques.

The Office Action states that Goldszmidt discloses Applicant's claimed gateways (the Office Action draws an analogy between Applicant's gateways and Goldszmidt's servers) responsible for managing one or more network elements (the Office Action draws an analogy between Applicant's network elements and Goldszmidt's clients). However, this is not the case according to the cited passages. In fact, the client is provided with a server ID by the control server, and the client initiates a connection with the server. When the connection is established, the server sends a streaming file to the client, but nowhere does the server perform Applicant's claimed step of managing the client because even a broad reading of Goldszmidt's server's action with respect to the client, which is confined to sending streaming data to the client, can be interpreted to include Applicant's claimed step of servers (Applicant's gateways) managing clients (Applicant's network elements). For this reason, Goldszmidt cannot anticipate Applicant's claims 1 and 44.

(2) The Office Action states that Goldszmidt discloses detecting failure of one of said distributed gateways (the Office Action states: detecting a failure in the stream or stream server 1.2 FIG. 1b),

Applicant has amended claims 1 and 44 to clearly point out that Applicant's claimed gateway monitoring system performs Applicant's claimed step of detecting failure of a distributed gateway, as stated above. In the Office Action's comment with respect to the cited reference, the Office Action states an equivalence between Applicant's claimed gateway and Goldszmidt's server. Applicant's have pointed out that if Applicant's gateway and Goldszmidt's server are equivalent, then Goldszmidt cannot anticipate Applicant's claims 1 and 44.

(3) The Office Action states that Goldszmidt discloses receiving a notice (the Office Action states: the primary ID or the secondary ID) of the detected failure at a central management system (control server 1.1, FIG. 1a) (the Office Action states: when the client detects a failure in the stream of the primary streaming server, the client passes the primary ID or the secondary ID to the control server (1.1 of FIG. 1a)).

Applicant has amended claims 1 and 44 to clearly point out that Applicant's claimed notice of detected failure is received from Applicant's claimed gateway monitoring system that detected the failure in the previous step, not from the client (Applicant's claimed network element), as the Office Action states with respect to the cited passage. For this reason, Goldszmidt cannot anticipate Applicant's claims 1 and 44.

(4) The Office Action states that Goldszmidt discloses responsive to said receiving step, recovering, by the central management system, management of said one or more network elements for which said failed gateway had management responsibility by assigning management responsibility to at least one other of said plurality of distributed gateways (the Office Action states: switching the client agent to an alternate streaming server, see FIG. 1b, col. 7, line 11 -- col. 12, line 33). [Applicant assumes the Office Action meant col. *8*, line 33.]

In the cited passage (FIG. 1b; col. 7, line 11 – col. 12 (8), line 33), Goldszmidt states that a data structure that maps the clients to the servers is maintained on the client or the control server. Goldszmidt further states that when the client detects a failure, the client passes the identification of the failed server and the alternate server to the control server, the client requests an alternate server, the control server provides the client with the identification of the alternate server so the client can initiate another switch if necessary.

In other words, the client of Goldszmidt detects a failed server and reconnects to another server based on an ID provided by the control server. Neither the control server nor the server, however, perform Applicant's claimed step of recovering, by the central management system, management of network elements for which the failed gateway had management responsibility by assigning management responsibility to at least one other of the gateways because neither the control server nor the server of Goldszmidt exercises management over the clients of Goldszmidt. Whereas Goldszmidt's client detects failure and initiates recovery, Applicant claims a management recovery system (401 and 202, Applicant's FIG. 4) to recover management of the network element (e.g. 214, Applicant's FIG. 4) for which the failed gateway (e.g. 210, Applicant's FIG. 4) has management responsibility. Further, failure detection and recovery is not initiated by Applicant's network element, whereas Goldszmidt clearly states that the clients themselves detect failure and initiate recovery (col. 10, line 7). Therefore Goldszmidt cannot anticipate Applicant's claims 1 and 44 because Goldszmidt does not disclose all of Applicant's claimed steps and elements.

On page 6, with respect to claim 27,

(1) The Office Action states that Goldszmidt discloses a system comprising a plurality of network elements (clients 1.8, FIG. 1a could be multiple clients, col. 9, line 47 – to col. 10, line 48) and plurality of distributed gateways (servers 1.2, 1.3 of FIG. 1a could be gateways, col. 4, lines 27-58) each communicatively coupled to one or more of said plurality of network elements, wherein each of said plurality of distributed gateways is responsible for managing one or more of said plurality of network elements (FIGs. 1a, 5, col. 5, lines 22-64).

In the first cited passage (FIG. 1a; col. 9 line 47 – col. 10, line 48), Goldszmidt states that the client sends a request to the control server, and the control server determines a set of primary streaming servers that the client can connect to, that when the client detects a failure, the client communicates a request to the control server to switch to an alternate server, that the control server selects a new server, and that the new server begins providing the client with real-time multimedia streams. Elsewhere, Goldszmidt states that the client could further take the lead in selecting an alternate server by determining a delivery rate and comparing it to a threshold (col. 10, lines 49-63). Goldszmidt states that the server could send a distress or switch signal, but ultimately it is the client that detects failure and initiates recovery.

In the second cited passage (FIG. 1a and col. 4, lines 27-58), Goldszmidt states that there is a control server and sets of streaming servers, that the control server assigns servers to particular sets, and that the control server can receive and distribute client requests among the servers. The Office Action states a configuration in which, according to Goldszmidt's system, a control server (the Office Action refers to Goldszmidt's control server as Applicant's central management system) can receive and distribute client requests (the Office Action refers Goldszmidt's client as Applicant's network element) among the servers (the Office Action refers Goldszmidt's server as Applicant's gateway).

In the third cited passage (FIGs. 1a, 5, col.. 5, lines 22-64), Goldszmidt states that the client can be directly connected to the control server or over a network.

The three cited passages taken together state that the control server can receive requests from the client and provide the client with information in which to establish communications with the appropriate server, and that the client determines if the server has failed and initiates recovery measures. Applicant claims, on the contrary, a plurality of

distributed gateways responsible for managing a plurality of network elements, or in the terminology of Goldszmidt, a plurality of servers responsible for managing a plurality of clients. However, nowhere does Goldszmidt state that the servers manage the clients, but in fact, in Goldszmidt there is no management of the clients whatsoever because the clients act autonomously in requesting server services, and the control server does not manage the servers, because for one device to manage another, the first device would have to be directing the second device to perform some action.

(2) The Office Action states that Goldszmidt discloses a gateway monitoring system (1.1 FIG. 1a), wherein said gateway monitoring system (1.1, FIG. 1a) is operable to detect failure of at least one of said distributed gateways and management recovery system communicatively coupled to said plurality of distributed gateways (the Office Action states: detecting a failure in the stream or stream server 1.2 FIG. 1b and further discloses a dispatcher subsystem (642 FIG. 6) for assigning primary and secondary reflectors to a client based on their desired source).

In the first cited reference (1.1, FIG. 1a), Goldszmidt depicts the control server, which the Office Action equates to Applicant's claimed gateway monitoring system. In the second cited reference (1.2 FIG. 1b), Goldszmidt depicts a server, which the Office Action equates to Applicant's claimed distributed gateway. In the third cited reference (642 FIG. 6), Goldszmidt depicts a dispatcher which assign primary and secondary reflectors (interface between servers and clients) to a client.

In other words, in this alternate embodiment, Goldszmidt's dispatcher performs the function of Goldszmidt's control server and Goldszmidt's reflectors perform the function of Goldszmidt's servers. Goldszmidt states that the dispatcher assigns reflectors based on the source the client requests (Goldszmidt, col. 15, lines 4-6). In this embodiment, therefore, as in the embodiment previously discussed, Goldszmidt's clients detect failure, whereas Applicant claims a gateway monitoring system coupled to the gateways which are coupled to the network elements, a separate element from Applicant's claimed gateway monitoring system, that detects failure. For this reason, Goldszmidt cannot anticipate Applicant's claim 27.

(3) The Office Action states that Goldszmidt discloses wherein said management recovery system is operable to autonomously recover management of said one or more network elements for which a detected failed gateway has management responsibility (the Office Action states: detecting failure of a streaming server and switching the client agent to an alternate streaming server, FIG. 1b, col. 7, line 11 -- to col. 12(8?), line 33, col. 9, lines 7-47, col. 14, line 61 – col. 15, line 42).

In the first cited passage (FIG. 1b, col. 7, line 11 -- to col. 12(8?), line 33), Goldszmidt states that a data structure that maps the clients to the servers is maintained on the client or the control server. Goldszmidt further states that when the client detects a failure, the client passes the identification of the failed server and the alternate server to the control server, the client requests an alternate server, the control server provides the client with the identification of the alternate server so the client can initiate another switch if necessary.

In the second cited passage (col. 9, lines 7-47), Goldszmidt states that when a connection from a streaming server to a client fails, the client sends a message to the control server, requests to be switched to an alternate server, is redirected by the control server, and receives streaming data from the alternate server. Goldszmidt states that the invention could be implemented in software and could be embodied on computer-readable media.

In the third cited passage (col. 14, line 61 – col. 15, line 42), Goldszmidt states that the servers are separated into mutually exclusive sets, and that either the client automatically switches to the secondary server after a failure, or the client requests the ID of the secondary server from the control server after a failure.

In other words, in either the first embodiment or the alternate embodiment, the client detects failure of a server and initiates recovery measures. Nowhere does Goldszmidt disclose or suggest Applicant's claimed management recovery system that recovers management of network elements (the Office Action has equated these to Goldszmidt's clients) for which a detected failed gateway (the Office Action has equated these to Goldszmidt's servers or reflectors) had management responsibility, because Goldszmidt's clients are not managed by any entity in Goldszmidt, including the server, the reflector, the

control server, or the dispatcher. For this reason, Goldszmidt does not anticipate Applicant's claim 27.

Since Goldszmidt does not anticipate and/or make obvious each and every element of Applicant's independent claims 27 and 44, and each and every step of Applicant's independent claim 1, Applicant's claims 1, 27, and 44, as well as dependent claims 1-26, 28-43, and 45-57 that depend, either directly or indirectly, therefrom and that further define the invention, are not anticipated by Goldszmidt, and a rejection under 35 U.S.C. § 102(e) is inappropriate. Applicant asserts that independent claims 1, 27, and 44, as well as dependent claims 1-26, 28-43, and 45-57 that depend, either directly or indirectly, therefrom and that further define the invention, are now in condition for allowance. Applicant respectfully requests the withdrawal of rejections under 35 U.S.C. § 102(e) (and 35 U.S.C. 103 (a)) with regards to dependent claims 20 and 40) for the reasons set forth above. Furthermore, a 35 U.S.C. § 103 rejection of these claims would be inappropriate as well. Applicant's claimed invention is not an obvious extension of the use of Goldszmidt to meet Applicant's patentable limitations.

Dependent claims 2-19, 21-26, 28-39, 41-43, and 45-47

To further Applicant's position of the patentability of claims 2-19, 21-26, 28-39, 41-43, and 45-57, Applicant notes the following.

On pages 3 and 8, with respect to dependent claims 2 and 47, which depend from claims 1 and 44, Examiner states that Goldszmidt discloses translating a communication protocol utilized by said one or more network elements (using the changed start up protocol of the TCP-router node so that recovery of the primary router will not cause a failure in a backup that has taken over for it, FIG. 1a, col. 6, lines 8-60).

In the cited passage (FIG. 1a, col. 6, lines 8-60), Goldszmidt states that a fault tolerant recoverable TCP/IP connection route can be used to provide primary and backup client request handlers, and that an affinity-based router can set up the system so that clients have affinity to one or more nodes that are preferred to handle that client's requests. Goldszmidt also states that when the primary fails, the connection state at the time of failure can be reconstructed by the backup router so that client connections won't be lost, and that the

process by which the primary is switched to the backup (the start up protocol for a TCP-router node) is changed to accommodate a configuration having primary and backup nodes.

In other words, the "start up protocol" is therefore a list of commands necessary to activate either the primary or backup TCP-router node, but it is not Applicant's claimed communication protocol as is commonly understood in the art and presented in Applicant's Specification to mean protocols such as SNMP or CMIP (Applicant's Specification, page 12, col. 15-20). Nowhere does Goldszmidt disclose Applicant's claimed translating a communication protocol utilized by one or more network elements because, Goldszmidt states that a TCP-router node is used, which means that the TCP/IP protocol is expected to be used as the communication protocol in that node, but not that Applicant's claimed translation of a communication protocol occurs, such as, for example, from SNMP to CMIP. For this reason, Goldszmidt cannot anticipate Applicant's claims 2 and 47.

On pages 3-4 and 7-8, with respect to dependent claims 4-12, 28-35, 41, and 48-53, which depend from independent claims 1 (4-12), 27 (28-35 and 41), and 44 (48-53) the Office Action states that Goldszmidt discloses (FIGs. 1a and 1b; col. 7 line 11 – col. 8, line 34; col. 9, lines 6-47)

(1) said management system controlling said recovering step, said one or more gateway monitoring systems performing said detecting step and polling said plurality of distributed gateways (detecting failure in streaming servers acting as gateways to clients) (claims 4-6 and 48);

(2) said one or more gateway monitoring systems controlling said recovering step, determining management activities for which a detected failed gateway is responsible for performing and determining one or more available gateways from said plurality of distributed gateways, which are available for assuming at least a portion of said management activities of said detected failed gateway (detecting failure in streaming servers acting as gateways to clients) (claims 7-9, 32, 33, 50, and 51);

(3) that one or more available gateways are a subset (clusters of FIG. 1a) of said plurality of distributed gateways, available gateways are gateways local to said detected failed gateway (detecting a failed server) and grouping two or more of said plurality of distributed gateways (claims 10-12, 34, 35, 49, 52, and 53);

(4) said management recovery system is operable to assign management responsibility of said one or more network elements for which said detected failed gateway had management responsibility to at least one other of said plurality of distributed gateways (detecting failure of a streaming server and switching the client agent to an alternate streaming server) (claim 28);

(5) translation of a communication protocol utilized by said one or more network elements, said gateway monitoring system and said management recovery system are integrated on a common platform and operable to poll said plurality of distributed gateways (detecting failure in streaming servers acting as gateway to clients) (claims 29-31); and

(6) said management recovery system to present a user interface for alerting a user of said detected failed gateway (claim 41).

The shortcomings of the first cited passage (col. 7, line 11 – col. 8, line 34) have been set forth previously and will not be repeated here except to reiterate that the client of Goldszmidt detects if there is a failure of communication between itself and the server. The shortcomings of the second cited passage (col. 9, lines 6-47) have been set forth previously and will not be repeated here except to reiterate that the process by which failure recovery occurs is initiated by the client.

On page 3, with respect to claim 4, nowhere does Goldszmidt disclose or suggest Applicant's claimed management system controlling said recovering step, which includes recovering management of network elements, because, as stated previously, the network elements (clients) are not managed in the system of Goldszmidt, the clients manage detection and recovery of failure.

On pages 3 and 8, with respect to claims 6 and 48, Goldszmidt does not disclose or suggest Applicant's claimed gateway monitoring systems polling the distributed gateways, which the Office Action has equated to Goldszmidt's servers, because the gateway monitoring system, which Applicant assumes the Office Action would equate to Goldszmidt's control server, relies on Goldszmidt's client to determine if the Goldszmidt's servers have failed. Polling involves sending a request from the gateway monitoring system to the gateways and determining if a response is timely or ever received. Goldszmidt states that the client determines if the stream has failed, but nowhere does Goldszmidt disclose that

the client or control server polls the streaming servers. Further, neither the client nor the control server is analogous to Applicant's gateway monitoring system. Thus, even if, in functionality and connectivity, Goldszmidt's servers anticipated Applicant's claimed plurality of distributed gateways, which they do not, nowhere does Goldszmidt disclose polling of the servers by any of Goldszmidt's elements, including the control server and the clients. For these reasons, Goldszmidt does not anticipate Applicant's claims 4,6, and 48.

On page 4, with respect to claim 7, nowhere does Goldszmidt disclose or suggest Applicant's claimed gateway monitoring system controlling the recovering step, which includes recovering Applicant's claimed network element (the Office Action equates Applicant's network element to Goldszmidt's client) for which a failed gateway had management responsibility, because Goldszmidt states that the client controls recovery, and further, there is no management responsibility disclosed or suggested of Goldszmidt's client. For these reasons, Goldszmidt does not anticipate Applicant's claim 7.

On pages 4, 7, and 8, with respect to claims 8, 9, 32, 33, 50, and 51, nowhere does Goldszmidt disclose or suggest Applicant's claimed management recovery system (claim 32) that determines management activities for which a detected failed gateway is responsible for performing, nor Applicant's claimed determining a gateway that can assume the management activities of a failed gateway, because in Goldszmidt, the servers (the Office Action states an equivalence between Goldszmidt's servers and Applicant's claimed gateways) do not perform management activities, they simply respond to client requests for data and provide that data. Thus, Goldszmidt does not anticipate claims 8, 9, 32, 33, 50, and 51.

On pages 4, 7, and 8, with respect to claims 11, 35, and 53, nowhere does Goldszmidt disclose or suggest Applicant's claimed available gateways that are local to the detected failed gateway because Goldszmidt does not state any geographical limitation on the servers whatsoever. For this reason, Goldszmidt does not anticipate Applicant's claims 11, 35, and 53.

On page 7, with respect to claim 28, nowhere does Goldszmidt disclose or suggest Applicant's claimed management recovery system that assigns management responsibility of a network element from a failed gateway to another of the plurality of distributed gateways because Goldszmidt's servers (which the Office Action has drawn equivalence with Applicant's gateways) do not have management responsibility over Goldszmidt's clients

(which the Office Action has drawn equivalence with Applicant's network elements). For this reason, Goldszmidt cannot anticipate Applicant's claim 28.

On page 7, with respect to claim 29, nowhere does Goldszmidt disclose or suggest translation of a communication protocol, as discussed previously (see the argument with respect to claims 2 and 47). For this reason, Goldszmidt cannot anticipate Applicant's claim 29.

On page 7, with respect to claim 30, Applicant claims a gateway management system and management recovery system that are integrated on a common platform. The Office Action analogizes both the gateway management system and the management recovery system to Goldszmidt's control server, but Goldszmidt states that the client initiates functions such as the gateway management system and management recovery system might perform, and the control server supports the client to enable these functions. Nowhere does Goldszmidt disclose or suggest that the client and the control server could be integrated on a common platform, and Goldszmidt's FIG. 3d teaches away from such a configuration. Applicant therefore asserts that Goldszmidt cannot anticipate Applicant's claim 30.

On page 7, with respect to claim 31, Goldszmidt cannot anticipate Applicant's claim 31 because nowhere does Goldszmidt disclose a gateway monitoring system that is operable to poll the plurality of distributed gateways, as shown previously with respect to claims 6 and 48. Therefore, Goldszmidt cannot anticipate Applicant's claim 31.

On page 4, with respect to claims 13 and 14, the Office Action states that Goldszmidt discloses determining gateways that are included in a common grouping with said detected failed gateway and said grouping is predetermined based at least in part on a criteria selected from the group consisting of gateway communication protocol, gateway location, and any user defined criteria (FIGs. 1a and 1b; col. 7, line 11 – col. 8, line 34; col. 9, line 48 – col. 10, line 63).

In the cited passage (FIG. 1b; col. 7, line 11 – col. 12 (8), line 33), Goldszmidt states that a data structure that maps the clients to the servers is maintained on the client or the control server. Goldszmidt further states that when the client detects a failure, the client passes the identification of the failed server and the alternate server to the control server, the client requests an alternate server, the control server provides the client with the identification of the alternate server so the client can initiate another switch if necessary. In other words,

the client of Goldszmidt detects a failed server and reconnects to another server based on an ID provided by the control server.

In the second cited passage (col. 9, line 48 – col. 10, line 63) Goldszmidt states that the streaming servers are divided into at least two non-overlapping sets where each set includes at least one streaming server, that the control server identifies a set of primary and alternate streaming servers that the client can connect to, and that the control server communications the identifiers of the primary and alternate streaming servers to the client. Goldszmidt further states that the client is receiving a continuous multimedia stream, detects a failure (through bit or frame/sample rate, delivery rate, packets arriving out of order, numbering mechanisms available in possible protocols, a distress signal sent by the streaming server or the control server, or a user-initiated action), communicates a request to the control server to switch to the alternate server, and the client receives the multimedia streams from the alternate streaming server.

The shortcomings of the analogies of the Office Action have been set forth previously and will not be repeated here. With respect to claim 13, however, even if the analogies of the Office Action were correct, which they are not, Applicant asserts that Goldszmidt teaches away from Applicant's claimed determining an available gateway from gateways that are included in a common grouping with the detected failed gateway because Goldszmidt states that the primary and alternate streaming servers are divided into at least two non-overlapping sets. Thus, the alternate streaming server could not be included in a common grouping with the primary (failed) streaming server, and Goldszmidt cannot anticipate Applicant's claim 13. With respect to claim 14, although the cited passage gives no criteria for grouping the streaming servers together, Goldszmidt states that the servers are grouped together by port number (Goldszmidt, col. 9, lines 2-4), but not by either gateway communication protocol, gateway location, or user-defined criteria, and thus, Goldszmidt cannot anticipate claim 14.

On pages 4-8, with respect to claims 15-19, 21-26, 37, 38, 42, 43, 45, 46, 55-57, the Office Action states (FIG. 1b; col. 7, line 11 -- col. 12, line 33)

(1) that Goldszmidt discloses distributing said management activities of said detected failed gateway to at least one of said one or more available gateways, determining operational load of said available gateways (utilization rate) and performing load balancing in distributing said management activities to said at least one of said one or more available

gateways and load balancing is performed autonomously by a processor-based system (claims 15-17, 21-23, 37, 38, 46, and 56, pages 4, 7, and 8) (detecting failure of a streaming server and switching the client agent to an alternate streaming server);

(2) that Goldszmidt discloses determining the operational load for each of said management activities, allocating said management activities to one or more of said available gateways in a manner that approximately balances each of their operational loads and said operational load of said available gateways is determined dynamically, and allocation of said management activities is determined based at least in part on said determined operational load of said available gateways (claims 18, 19, 39, 55, and 57, pages 5, 7, and 8) (detecting failure of a streaming server and switching the client agent to an alternate streaming server);

(3) that Goldszmidt discloses translating a plurality of different communication protocols, user predefining at least one of said plurality of distributed gateways to be used in recovering management of one or more network elements for which a particular one of said plurality of distributed gateways has management responsibility in the event of a failure of said particular one of said plurality of distributed gateways (claims 24, 25, 42, and 45, pages 5 and 8) (detecting failure of a streaming server and switching the client agent to an alternate streaming server); and

(4) that Goldszmidt discloses the user predefining criteria to be used in recovering management of one or more network elements in the event of a failure of one or said plurality of distributed gateways (claims 26 and 43, pages 6 and 8) (detecting failure of a streaming server and switching the client agent to an alternate streaming server).

In the cited passage (FIG. 1b; col. 7, line 11 – col. 12 (8), line 33), Goldszmidt states that a data structure that maps the clients to the servers is maintained on the client or the control server. Goldszmidt further states that when the client detects a failure, the client passes the identification of the failed server and the alternate server to the control server, the client requests an alternate server, the control server provides the client with the identification of the alternate server so the client can initiate another switch if necessary. In other words, the client of Goldszmidt detects a failed server and reconnects to another server based on an ID provided by the control server.

On pages 4, 5, 7, and 8, with respect to claims 15, 16, 21, 23, 37, 38, and 56, nowhere does Goldszmidt disclose or suggest Applicant's claimed gateways (the Office Action has

analogized Applicant's claimed gateways to Goldszmidt's servers) that perform Applicant's claimed management activities, because Goldszmidt's servers simply react to requests by a client for data, and routed client requests from the control server   For this reason, Goldszmidt cannot anticipate claims 15, 16, 21, 23, 37, 38, and 56.

On page 5, with respect to claim 24, Applicant reiterates that nowhere does Goldszmidt disclose protocol translation (see argument with respect to claims 2 and 47), and therefore, Goldszmidt cannot anticipate Applicant's claim 24.

On pages 7 and 8, with respect to claims 36 and 54, with respect to the cited passage,(col. 6, lines 32-60; col. 7, lines 22-52):

(1) the Office Action states that Goldszmidt discloses translating a common communication protocol as said detected failed gateway (claim 36); and

(2) the Office Action states that Goldszmidt discloses translation of a communication protocol utilized by said one or more network elements (claim 54).

In the first cited passage (col. 6, lines 32-60), Goldszmidt states that that any of the server nodes in a multi-node affinity-based system can handle a client request, that clients have affinity to one or more of the server nodes, that a node may be designated as a TCP router, that the TCP router selects one of the nodes in the multi-node server to process the client request and routes the request to the selected node.

In the second cited passage (col. 7, lines 22-52), Goldszmidt states that the client agent is assigned a primary and secondary streaming server, that the identifications of these servers are stored in a data structure at the client, that when the client detects a failure the client passes the identification of the streaming server(s) to the control server, that the control server switches the client to the secondary server, that the secondary streaming server now becomes the primary streaming server, and the primary streaming server becomes the secondary streaming server. Goldszmidt states that the primary and secondary streaming servers could be sets of servers that correspond with any server using odd- or even-numbered ports. Goldszmidt states that the client may switch back and forth between the two sets of servers. Goldszmidt states that the multimedia stream is broadcast over the Internet and the client is a conventional computer workstation equipped with a standard browser.

Applicant asserts that, in neither cited passage, nor elsewhere, does Goldszmidt disclose Applicant's claimed determining an available gateway that can translate a common communication protocol as the failed gateway. Goldszmidt states that a TCP router selects a node but nowhere does Goldszmidt disclose or suggest that the TCP router selects a node based on its ability to translate the same communications protocol as the failed gateway. As previously stated with respect to claims 2 and 47, communications protocol translation requires steps that are not disclosed or suggested by Goldszmidt, and therefore Goldszmidt cannot anticipate claims 36 and 54.

In summary, with respect to dependent claims 2-19, 21-26, 28-39, 41-43, and 45-57, for at least the reasons stated above, as well as by virtue of their dependency upon allowable independent claims 1, 27, and 44, Goldszmidt does not anticipate Applicant's dependent claims 2-19, 21-26, 28-39, 41-43, and 45-57. Since Goldszmidt does not anticipate each and every element of Applicant's dependent claims 2-19, 21-26, 28-39, 41-43, and 45-57, either expressly or inherently, a rejection under 35 U.S.C. § 102(e) is inappropriate. Applicant asserts that dependent claims 2-19, 21-26, 28-39, 41-43, and 45-57 are now in condition for allowance. Applicant respectfully requests the withdrawal of rejections under 35 U.S.C. § 102(e) with regards to dependent claims 2-19, 21-26, 28-39, 41-43, and 45-57 for the reasons set forth above. Furthermore, a 35 U.S.C. § 103 rejection of these claims would be inappropriate as well. Applicant's claimed invention is not an obvious extension of the use of Goldszmidt to meet Applicant's patentable limitations.

III. REJECTIONS UNDER 35 USC § 103

On pages 8-9, paragraphs 4-5, the Office Action rejects dependent claims 20 and 40, which depend on claims 1 and 27, under 35 U.S.C. § 103(a) as being unpatentable over Goldszmidt in view of Wolf.

Applicant respectfully points out that the cited reference, Wolf, was published on April 16, 2002, almost a year after the filing date of the present application, May 29, 2001. Applicant respectfully reserves the right to file a petition under 37 C.F.R. § 1.131 to swear behind Wolf.

On page 9 of the Office Action, in paragraph 5, with respect to dependent claims 20 and 40,

(1) The Office Action states that Goldszmidt's teachings still apply as set out above.

As a rebuttal to Examiner's position, Applicant respectfully points out that Goldszmidt fails as a reference under 35 U.S.C. § 103 for the same reasons recited above with respect to the 35 U.S.C. § 102 rejection. Therefore, Applicant asserts that Goldszmidt does not make obvious Applicant's invention for the reasons stated above.

(2) The Office Action states that Goldszmidt does not specifically disclose load balancing is performed according to a greedy algorithm.

(3) The Office Action states that Wolf discloses load balancing is performed according to a greedy algorithm (using a logical assignment of overlapping clusters is updated periodically via a greedy algorithm) (col. 9, lines 25-62, col. 17, lines 35-52).

In the first cited passage (col. 9, lines 25-62), Wolf states an example of a load balancing method. Elsewhere, Wolf states a method for balancing load across a plurality of web servers of a web server farm hosting multiple web sites designed to handle multiple customers including the step of logically assigning each web site to one or more servers according to various predetermined criteria. The set of all servers to which a particular web site is assigned is called its cluster (col. 1, lines 64-66), and clusters can overlap so that more than one web site can be assigned to a server. In the second cited passage (col. 17, lines 35-52), Wolf states that the logical assignment (of web sites) of overlapping clusters is updated periodically via a greedy algorithm that includes steps for reoptimizing the topology of the underlying assignment graph based on the relative amounts of activity at the various web sites.

Applicant asserts that nowhere does the combination of Goldszmidt and Wolf disclose or suggest Applicant's claimed performing load balancing according to a greedy algorithm in distributing the management activities to the available gateways because Goldszmidt does not disclose management activities at all in the servers (the Office Action equates Goldszmidt's servers with Applicant's claimed gateways).

Further, Applicant asserts that Goldszmidt and Wolf are not combinable because to combine them would render Goldszmidt unsatisfactory for its intended purpose. The MPEP § 2143.01(V) states that, when combining references, if the proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to combine the references (*In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984). In Goldszmidt, the clients request a server by ID number based on IDs that were provided to the client by the control server. In Wolf, customers (Goldszmidt's clients) are assigned to servers by a load controller. Thus, the proposed modification to Goldszmidt of adding the teachings of Wolf would cause Goldszmidt to become unsatisfactory for its intended use because Goldszmidt requires a client to detect a failure and request a new server, whereas if Wolf were added to Goldszmidt, when a client of Goldszmidt automatically failed over to the alternate server it was provided the ID of when it first requested a server, Wolf's assignment by routing probabilities could cause another requesting client to overload the alternate server. Further, the sets of servers as defined by Goldszmidt are mutually exclusive, whereas the set of all servers to which a web site in Wolf is assigned, the "cluster", can overlap with another cluster. In Goldszmidt, the primary and alternate IDs point to servers that are in mutually exclusive sets. The server grouping and assignment mechanisms in Goldszmidt and Wolf would not operate compatibly, and thus Goldszmidt would become unsatisfactory for its intended use.

Further, the MPEP § 2143.01(VI) states that if the proposed combination would change the principle of operation of the prior art, then the teaching cannot render the claims prima facie obvious (*In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959)). Applicant asserts that the proposed combination of Goldszmidt with Wolf would change the principle of operation of Goldszmidt because Goldszmidt is designed to allow the client to automatically switch from one server set to another mutually exclusive server set when the client detects a failure in the first server set, whereas Wolf's servers are grouped according to web site affinity, and the groups (clusters) are designed to overlap.

In order for a rejection under 35 U.S.C. §103 to be sustained, the Examiner must establish a prima facie case of obviousness. As pointed out in MPEP § 2142, one of the three criteria to establish a prima facie case of obviousness is that the prior art reference(s) must teach or suggest all the claim limitations. To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in

the reference itself or in the knowledge generally available to one of ordinary skill in the art, to modify the reference. Second, there must be a reasonable expectation of success. Finally, the prior art reference must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in Applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). Further, obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art.

Because Goldszmidt and Wolf combined do not teach or suggest all the claim limitations of Applicant's claims 20 and 40, and because Goldszmidt and Wolf are not combinable, Applicant's dependent claims 20 and 40 are not made obvious by Goldszmidt and Wolf, and a rejection under 35 U.S.C. § 103(a) is inappropriate. Applicant asserts that dependent claims 20 and 40 are now in condition for allowance. Applicant respectfully requests the withdrawal of the rejection under 35 U.S.C. § 103(a) with regards to dependent claims 20 and 40 for the reasons set forth above.
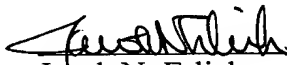
IV. CONCLUSION

Claims 1, 27, and 44 are believed to be in condition for allowance for the reasons provided herein. All dependent claims, 2-26, 28-43, and 45-57, are also allowable for the reasons presented above, and further because they depend upon allowable independent claims, and are therefore also in condition for allowance.

Although no additional fees are anticipated, the Commissioner for Patents is authorized to charge additional fees or credit overpayment to Deposit Account No. 50-1078.

The following information is presented in the event that a call may be deemed desirable by the Examiner: Jacob N. Erlich (617) 854-4000.

Respectfully submitted on behalf of Applicant

Date: January 30, 2006

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